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HARDY PRIMROSES

FEB 28 1944



BARNHAVEN
PRIMROSE
GUIDE
and
CATALOG
For
1944-1945

P. rosea grandiflora from the alpine meadows of Afghanistan
and Northern India

BARNHAVEN GARDENS
GRESHAM, OREGON

LEW and FLORENCE LEVY, *Growers and Hybridizers*

FROM THE HEIGHTS OF THE WORLD

Primroses and springtime have always advanced hand in hand to stand before mankind in a beauty that is ever radiant, fresh and pure. Beginning before winter has quite gone, primrose time starts like a trickling mountain stream released by the first thawing, gathers strength and momentum as it courses down the season adding blooms from the world's northern valleys, woodlands, mountain ledges and meadows, and spills its crest into late spring and summer.

That vast numbers of the primula family are from the mountains of cold countries is no longer a surprise to most gardeners. To know that these widely separated sections of the world have in common at least two conditions affecting vegetation is the key to growing primroses successfully. Primulas have concentrated in three main alpine regions—the European Alps, the Caucasus and the Himalayas in Asia. These three centers are linked together by members of the family scattered over the British Isles, northern and central Europe, the Balkans, Turkey, Afghanistan, Japan, Siberia, across to the Aleutians, Alaska and down the spine of the Rockies.

In these territories moisture in every degree and invention is present during the summer to keep the plants cool and growing: the weekly rain storms of the Alps; England's showers, fogs, mist and dew; the daily bucketfuls released by the monsoon over the Himalayas; the sudden storms and heavy dews of the Caucasus; melting snows above ground and transient moisture underground—these conditions may have generated the great thirst of the primrose family, at any rate, it is thus satisfied. Only a few isolated exceptions have escaped the family trait due to naturally drier conditions.

When this need for summer water is supplied—even in the spring and fall if these seasons should be unusually dry—and the perfect drainage of their homelands provided together with shade from the hot afternoon sun, there is no primrose

that will not respond to the full extent of its loveliness. Drouth, hot sun and poor drainage are the enemies of primroses, not cold, for they are hardy in all parts of the United States, Alaska and Canada wherever gardening is possible.

AT BARNHAVEN

Primroses have been our hobby for a good many years. We have been selecting and hand-pollinating English Polyanthus and Acaulis primroses long enough to have identified their descriptions with this country, building upon the foundation of excellence given them by world famous English firms. Practically all Polyanthus and Acaulis offered this year are the result of scientific hybridizing. Next year all plants will be from hand-pollinated seed.

Selecting and hand-pollinating Auriculas; selecting the best forms of Asiatic primulas; crossing species for new hybrids; importing new species, testing and acclimating them, making surveys as the plants go out over the country is all part of our work. Such selection and scientific grooming of plants that began as thoroughbreds make them unexcelled anywhere. Seeds of these plants are harvested only as they ripen, are properly cured and stored, tested for germination and sold the current year.

Our plants are not coddled but grow outdoors the year around and know all the hardships of winter. They are not stimulated with quick-acting fertilizers but fed a moderate ration of slow-acting organic plant food, either raw bonemeal or barnyard manure. Thus their vitality and energy is at its highest when they are shipped.

This year's Primrose Guide and Catalog has been planned as a planting as well as a cultural guide. The friendliness and appreciation shown our work has made us cast about for ways to increase your pleasure with primroses.



Polyanthus Primroses

Plants

SECTION I.

All of the primrose types in this section are used for bedding and edging, or as specimen plants, in partly shaded borders; north and east exposures; light woodland settings and all garden spots that are shaded from the afternoon sun.

POLYANTHUS PRIMROSES

The primrose known as Polyanthus is a plant with a haphazard beginning. Occasionally it was recognized as a distinct type in 17th century England but not until the 19th century was it generally distinguished from the Cowslip and Oxlip. These last two and the true English primrose all hybridize very readily when opportunity permits and in this way the earlier Polyanthus came into being. When the rosy hued and violet primroses were brought from the Caucasus and eastern Mediterranean countries, natural and artificial inter-breeding was carried on to produce a range of colors and blends unequaled in any plant.

At the present time the Polyanthus is queen of spring perennials both in England and parts of the United States. Full and shapely clusters of jewel-like blossoms are held aloft by sturdy stalks from 6 to 12 inches high. In the Barnhaven Exhibition Strain each individual bloom is of clear color, exquisite texture and is rarely under silver dollar size. Those that are fragrant are scented lightly of violets, ripe apricots or fresh honey.

Almost all of the following plants are the result of hand pollination and unless otherwise stated are \$2.50 a dozen.

HARVEST YELLOWS—Pale golden shades; rich yellows deepening to orange. Like ripening grain fields at harvest time.

INDIAN REDS—Brilliant scarlets; rich, glowing crimsons and velvet-dark maroons.

GRAND CANYON SHADES—Vivid, blended colors that are difficult to identify such as terra-cotta and adobe shades, coppery tones.

WINTER WHITE—Frosty, sparkling white with gold star.

PASTELS—Light, suffused tints such as ivory, pink, rose and violet blends.

AMERICAN MIXTURE—Assorted colors chosen from plants listed above.

MARINE BLUES—Blues varying from deep to less intense shades, 35c, 3 for \$1.00.

**When definite shades or blends of any color group are ordered, it is well to name an alternate choice. Some shades are quite extraordinary and are not only less abundant but are eagerly bought as soon as color is apparent.*

NAMED POLYANTHUS

To the four original Polyanthus named by us a semi-double and an old duplex form of the 16th century has been added. The combination of classic line and outstanding color makes these Named Polyanthus much sought after, and although the supply at the beginning of the season is adequate, toward the end of the season the stock is sometimes depleted. If substitution may be made please state your choice.

LILLIAN RUSSELL—Full formed and shapely, the ruffled blossoms are a glowing American Beauty shade. The long, pointed calyx holds the bloom like a tea rose. 50c each.

KWAN YIN—Almost black-stemmed, this aristocrat is an unusual Chinese red with a clear-cut golden star. Its elegance of form and line suggested China's Goddess of Mercy. 50c each.

JANE ADDAMS—An intense, cobalt blue remaining as true and steadfast in autumn as it does each spring. No plant could be more generous with its bloom. Springtime finds the foliage almost hidden from view, in summer there is a scattering of blossoms and in fall and winter it blooms whenever snow permits. 50c each.

QUEEN ELIZABETH—A rich and outstanding bronze of regal bearing. 50c each.

SEMI-DOUBLE PASTEL—A beautiful salmon shade. The stalks are exceptionally heavy and bear the full, semi-double blossoms in large and compact clusters. \$1 each.

PINK HOSE-IN-HOSE—A rare type in which the green calyx is replaced by a perfectly duplicated blossom. One flower thus appears to grow out of another. The old name is hose-in-hose, sometimes hand-in-hand, duplex or two-story. This is not a modern plant but a very old one as indicated by the smaller blossoms of a true and delicate pink. A rare collectors' piece that should be watered often and watched over carefully. \$1.00 each.

ACAULIS

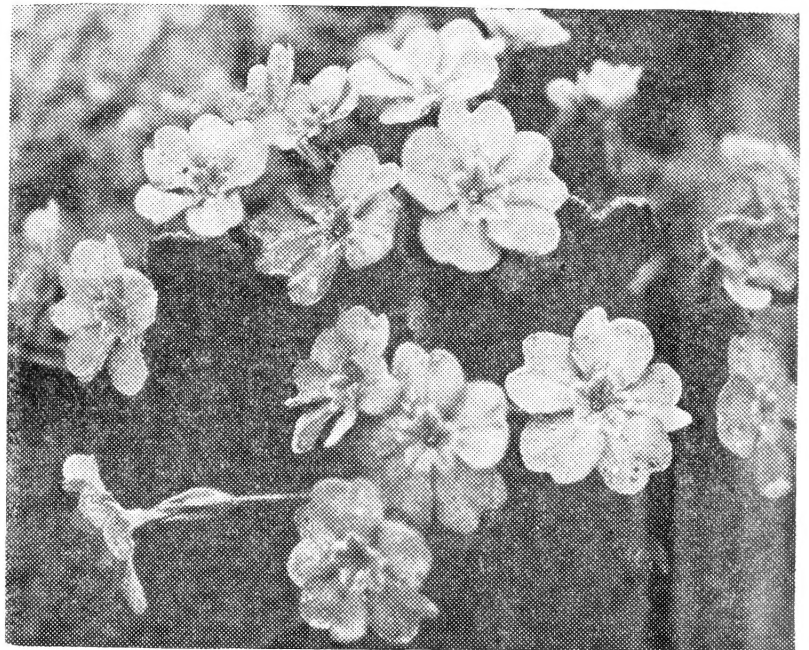
The Acaulis primrose precedes the Polyanthus in bloom and bears its wealth of large blossoms on individual stems instead of clustering at the top of a stalk. This is one of the primroses that braves the ice and snow of late winter to thrill the gardener. For the most part, the blossoms are even larger than those of the Polyanthus and its colors like to play over the more delicate pastel tones. There has never been a happier union than the joining of the butter yellow, true English primrose with the pink, rose and purple primrose of the Levant to produce these plants that grow in the affections with each spring they usher in.

All of the following plants are the result of hand-pollination and, unless otherwise stated, are \$2.50 a dozen.

HARBINGER—This is the beautiful white Acaulis, originated in England, that is world famous for its profusion of great, glistening white stars with golden centers appearing in late winter.

SPRINGTIME MIXTURE—Red shades; white; some yellows, pinks, orchid and purple. Very large blossoms in early abundance. Unexcelled for nosegays, small arrangements, corsages, etc.

AMERICAN BLUES—Deep indigo; brighter and lighter shades. 35c each, 3 for \$1.00.



P. Acaulis—Indigo Blue

NAMED ACAULIS

QUEEN VICTORIA—Exceedingly large and handsome. Velvet flowers of royal purple. 50c each.

COWSLIPS

The small, cup-shaped fragrant blossoms are held in a one-sided and drooping umbel. These are not showy like the Polyanthus but are held in high esteem by those who collect primrose types and who knew them in childhood. Usually yellow, occasionally red shades. 25c each.

DOUBLE PRIMROSES

Walking through the countryside of England, Ireland and France in the springtime, double primroses are to be seen on every hand luxuriating in shady spots, holding their dainty blossoms so like miniature roses up to the moisture laden air. Not only the few we know are there, but every color, yes, even blue, is common. Many have been there for centuries.

Of the few that have found their way into the United States the double lavender, white, sulphur and red edged with white are seen more and more often. The first three are very old. The double is undoubtedly one of the eastern Mediterranean primroses that sported double in England several hundred years ago. The double white may be an albino form of the lavender, and the double sulphur is probably a doubled English primrose. New doubles are produced by seed specially hybridized to that end over a number of years. But when the flowers are fully double they no longer set seed, increasing only by division, so that all the doubles, both new and old, scattered about the world are pieces of the original plants.

All are very free flowering and blossoms should occasionally be picked to relieve the strain on the plant.

DOUBLE LAVENDER—A shade of lavender that varies almost to pink depending upon the soil. 35c each, 3 for \$1.00.

DOUBLE WHITE—White overlaid at times with a slight blush. 50c each.

DOUBLE SULPHUR—Straw colored flowers of great beauty. \$1.00 each.



Double Primrose

AURICULAS

Few plants are rooted deeper in the hearts of the people of western nations than Auriculas. Native to the Swiss Alps, they were collected and cultivated by the Swiss and Austrians before the 16th century. Shortly after they were sent north to Belgium, France and Germany to become the darlings of the French and a cult with the Flemish weavers. They accompanied the Huguenots in their escape to England in the latter half of the 16th century concentrating first in Lancashire and Yorkshire before spreading out over the Isles. From there they came to America in the 17th century. Among some of the common names attached to them are Bears' Ears, Tanner's Apron, Dusty Miller, Mountain, French and Swedish Cowslip, with uncounted numbers of individual plants identified by quaint and often amusing names.

Scientists are still uncertain about the exact parentage of the garden Auricula but know at least three or four species of Swiss alpine primulas that joined together to contribute beauty and fragrance to their natural child. Such multiplicity of parents accounts for the endless variety of forms to be found in garden Auriculas.

Auriculas are hardy as rocks but very sensitive to poor drainage. Unless soil is naturally rocky it is always well to work rock chips or gravel in the bed before planting, and after planting to spread a good layer of chips or gravel on top of the ground around the woody trunk to protect it from excess surface moisture. This thick, woody stem that is accustomed to sitting in rocky debris or on rock ledges is the Achilles' heel of Auriculas—their one vulnerable spot. They bloom in late spring with and after the Polyanthus so that a collection of Acaulis, Polyanthus and Auriculas overlap their blooming periods and give a sequence of flowers from late winter to late spring. They bloom in clusters like Polyanthus on stalks 6 to 9 inches tall.

ARTIST'S SHADES—Raspberry, leather colors, wine, plum and intermediate pastels. 35c each, 3 for \$1.00.

ANTIQUE SHADES—Imperial yellow, mauve, some lavender-blue and brown, 50c each.



P. Auricula

PRIMULA JULIAE and HYBRIDS

It has been told how Julia's primrose was first found growing under a waterfall on the wild heights of the Caucasus and shortly after, in 1910, was introduced into England. In the scant 35 years it has been in cultivation, hundreds of happy hybrids have resulted from its eagerness to cross with the English primrose, Polyanthus, Cowslip, Oxlip and Levantine primrose. Professional and amateur interest in hybridizing Juliaes might be said to have reached the boiling point a few years ago in all the countries of western Europe, the British Isles, Canada and the United States. The result is that Juliae hybrids are everywhere, and everywhere loved for their elfin vivacity which is given so generously and for which little or nothing is asked in return.

The hybrids have the same wide flowering range as the parents, blooming from late winter on through late spring. They also are of two habits. Those favoring P. Juliae retain the creeping root-stock and spread like a mat over the ground. The others tend more to the rosette form of the English and Levantine parents. There are, however, many intermediate stages between the two.

All types multiply rapidly making them valuable for edgings and ground covers.

P. JULIAE—The original species from the Caucasus. Plants form mats of sparkling claret-red blossoms in mid-spring. 35c each, 3 for \$1.00.

P. JULIAE HYBRID PINK—A handsome new importation with large, clear pink flowers that begin to bloom in winter, continuing throughout spring. \$1.00 each.

P. JULIAE LAKEWOOD—Beautifully bronzed, dark green foliage cushioned with large, burgundy blossoms in early spring. Originated in Oregon. 50c each.

P. JULIAE ROBERTA—Large, lilac colored blossoms against leaves of delicate green together with its carpeting habit make Roberta dainty and desirable. A trifle later than Lakewood and by the same originator. 50c each.

P. JULIAE DOROTHY—One of the loveliest and most unusual of the imported Juliaes. It blooms on a short stalk like a miniature Polyanthus, is a rich butter yellow with deeply cleft blossoms and retains the creeping habit of P. Juliae. Mid-spring. \$1.00 each.

P. JULIAE PRIMROSE LODGE—A jaunty miniature Polyanthus type with deep wine colored blossoms preceding Dorothy in bloom. Originated in Illinois. 35c each, 3 for \$1.00.

P. JULIAE BUNTY—Large flowers of fine, deep blue over bronzed, dark green foliage. An imported plant of great beauty. Early. \$1.00 each.

P. JULIAE HYBRID HOSE-IN-HOSE—The rare duplex form in which one blossom appears to grow from the center of another. A glowing wine shade and so floriferous the medallion of foliage is almost hidden at blossom time. 50c each.



P. Juliae Hybrid Pink In Late Winter

CULTURE

Primroses, like other perennials, thrive when put in approximately the right situation, in a soil that is well drained and rich in humus and organic plant food. They need less sun and more water than most perennials. No plant responds more quickly to an occasional light cultivation or other maintenance work.

PLANT FOODS—All of the primroses listed in this Section do well in the situations suggested at the beginning in well drained, ordinary garden soil that has had leaf mold, well rotted barnyard manure, compost or like material thoroughly dug into it. Raw bone meal is an excellent plant food that supplies nutriment over a long period and is therefore especially suited to the slower growing primulas such as Auriculas. For the same reason ground oyster shell is good. Auriculas must have exceptionally good drainage and detailed notes are given under "Auriculas". The color of blue Polyanthus and blue Acaulis is intensified by higher soil acidity as for rhododendrons and azaleas, and by planting them in more shade than the others. Blue primroses usually bloom off color in the fall and very often change color when dug and shipped, but will return to their true shade each spring. Double primroses should also be placed in more shade than ordinary ones, given much more water and somewhat more barnyard manure to relieve the heavy strain of flowering. Well rotted manure carefully put around all plants in early spring provides easily assimilated food when growth begins and is a moisture con-

serving mulch during the summer.

PLANTING—Primroses should be given plenty of room to insure a free circulation of air around the leaves. All of those listed in this Section should have about a foot of space between plants. Juliaes may have less because of smaller leaves but most of these spread and will eventually cover a large area.

Plants shipped long distances usually arrive with leaves crisp and flowers fresh. Before planting, shake out the roots and, if the weather is warm at the time, remove all large leaves leaving only the small, young ones. Plant fairly deep so that each crown rests firmly in the top of the soil but allow no soil to lodge in the crowns. Pack the soil firmly and thoroughly around the roots. Water in and keep well watered and shaded until plants begin to grow, usually in from ten days to two weeks. If plants are delayed en route and have wilted, remove all large leaves and place the roots in a pan of water in the shade until plants recover.

Primroses are easily transplanted any time during the growing season but not in the winter. The latest date that primroses can be planted with complete safety is about a month before frost suspends growing weather. This allows the plants time to root and establish themselves.

DIVIDING—About every two years, or whenever the plant grows into a crowded clump and the flowers diminish in size, Polyanthus and Acaulis should be lifted, the crowns separated, roots cut back to three or four inches, large leaves removed,

and the divisions re-set in freshly dug and enriched soil. This is best done any time after flowering up to early fall depending upon convenience and whether or not seeds are desired. If water is available, July and August are the best months for dividing. Auriculas grow more slowly and prefer an undisturbed state for a longer period. Offsets of the plants can usually be pulled off, complete with roots, while the old plants remain in the ground. Juliaes may be divided or not according to the type of hybrid and the use for which they are intended.

PERENNIALISM—It is natural for the older leaves of English primroses to begin deterioration in summer, spotting and turning yellow. New leaf growth quickens after blooming and as it develops into healthy, green maturity, old leaves gradually, almost imperceptibly, die off as with most perennials on completing their cycle. Juliaes reach this stage later in the summer and early fall; Auriculas usually wait until fall and winter for the old leaves to yellow, the tightly rolled new leaves remaining sound and green.

PESTS—Increased knowledge in the control of garden pests has diminished a serious problem to one of petty annoyance. Strawberry Root-Weevil and Black Vine Weevil are repelled in the adult beetle stage by baiting with Go West, spraying the plants with arsenate of lead or putting a teaspoonful of tobacco dust in the bottom of each hole before planting. If bait is used the first application around plant crowns (allowing some to fall on the plants) should be made about mid-May continuing twice a month throughout the summer. A monthly spraying with lead arsenate beginning the middle of May will kill other leaf chewing insects as well.

The weevils, or larvae, of the beetle feed most heavily on the roots in the fall and winter. Rapidly diminishing leaves, loss of vitality, general sickly appearance usually indicate the presence of root-weevils and becomes very apparent from late

winter to mid-spring. To kill the root-weevils in the ground, dust arsenate of lead around the plants as closely to the crowns as possible and over the entire primrose bed at the rate of 5 pounds to 100 square feet. This washes into the ground with the rains and its effectiveness lasts for five years according to Michigan State College experiments.

Cutworms and slugs are destroyed by spraying with lead arsenate, any good slug bait or a strong solution of plug tobacco water poured on the plants twice a week for several weeks.

The orange mite known as red spider attacks plants on the under side of leaves during dry periods if not sufficiently watered or if situated in too much sun. Transplant to a shadier spot or water heavily, then dust the under side of leaves with micro-sulphur or spray under side of leaves with bill posters paste at the rate of one tablespoon to a gallon of water to suffocate the mites.

Mice sometimes feed on primroses in the winter time and rat poison should be placed in the mouse holes or around the plants before snow flies.

WINTER CARE—All of the primroses in Section I have wintered in temperatures of 25 degrees below zero. In cold climates they should receive the care given all perennials. Evergreen boughs, corn stalks or any material that admits light and air and yet breaks the force of drying winds should be placed over the plants when the ground is well frozen if there is no snow or ice to protect them. An early winter mulch of well rotted manure adds protection. A wise trick used in Wyoming is freezing the plants in a thick coating of ice by watering thoroughly during the first hard freeze and placing cornstalks over the ice. Primroses have remained thus for six and seven months and emerged green and fresh in the spring. In climates with rainy falls, soggy leaves should be removed from the plants before too many accumulate.

SECTION II.

For the less sunny parts of the rock garden—Auriculas and Juliaes are not only good as specimen plants but their habits make them particularly suited to the shadier parts of the rock garden. Next year, Primulas Clusiana and Wulfeniana, rose-colored gems from the Venetian and Austrian Alps, will be offered for the rock garden.

SECTION III.

All of the primrose types in this section are used for bedding or as specimen plants in shadier borders, the less sunny portions of east and north exposures, shadier woodland situations, streamsides, poolsides, gardens with limited amounts of sun.

ASIATIC PRIMULAS

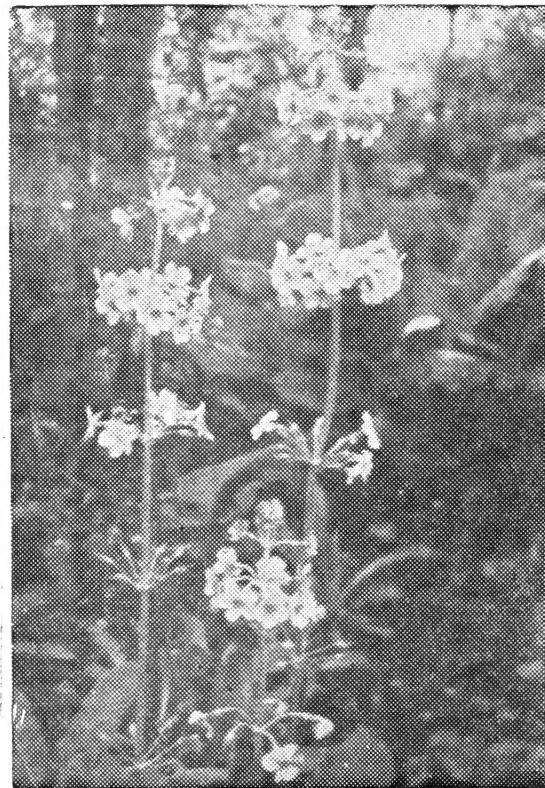
Boldly dramatic, the primulas of Asia differ from those of Europe and England both in appearance and legend. Too new for romantic tradition as we know it in the western world, the aura that clings to them is that of adventure and exploration in strange lands. Nature is on a grand scale in the Himalayas, the Chinese and Tibetan Alps, and here on the roof of the world the great majority of these primulas have their home. They grow in extravagant profusion at an average altitude of 2½ miles in alpine meadows and valleys, birch copses, at the edge of rhododendron thickets and bamboo brakes, mountain lakes and icy streams, intermingle with iris and poppies, seek shade under rose and honeysuckle tangles.

The greatest number of species have been introduced into cultivation in the last thirty years due to Tibet removing the ban against western travelers after the last war. Undoubtedly there are many still awaiting discovery. Because of Asia's summer monsoon rains from late spring to mid-fall, the gardener must be prepared to give these primulas even less sun than the English primroses and much more water, especially in the east and middle west.

CANDELABRA TYPE

Flowers encircle the stalk in successive tiers in late spring and early summer. All plants 35c, 3 for \$1.00, unless otherwise stated. Order as a collection, if wished.

- P. BULLEYANA**—The glory of Yunnan, China. Soft apricot-buff, red-gold in the bud. 2 feet.
- P. COCKBURNIANA**—Also from western China, this brilliant tangerine, or coppery scarlet primula sends up one stalk of fiery bloom after another. 1 foot.
- P. JAPONICA**—From the north of Yesso Island off the Asiatic mainland. A most robust and persistent plant. Delicate shades of pink and rose. 2 feet.
- P. JAPONICA ETNA**—A beautiful terra cotta variation of the above. 2 feet.
- P. PULVERULENTA**—Native to the Chinese-Tibetan border. A stately plant flowering in a glowing cerise red with golden brown, raised center. Stalks and buds heavily silvered. 2-3 feet.
- P. PULVERULENTA, BARTLEY PINK STRAIN**—This ethereally lovely pink variation of the above was developed over a period of years in England. Lavishly silvered it is in shades of pink. 2-3 feet, 50c each.
- P. RED HUGH HYBRID**—A cross between Primulas Cockburniana and pulverulenta originating in Ireland. A beautiful Chinese red with the silver stalks of pulverulenta.



Candelabra Type Primula

MORE ASIATIC PRIMULAS

- P. CORTUSOIDES**—Korea and Siberia. Delicate rose shades. Blooms in spring and sporadically throughout summer and fall. 1-1½ feet. 35c each.
- P. VEITCHII**—Clusters of fine, lilac-rose flowers in mid-spring with handsome, felt-backed leaves. Western China. 1-1½ feet. 35c each.
- P. SIEBOLDII**—An Asiatic polyanthus type bearing heads of large, especially beautiful flowers in late spring on stems 9 to 12 inches. Shades of rose and lavender. Some white. Siberia, Korea and Japan. 50c each. (P. Sieboldii goes dormant in the summer and requires only moderate moisture).
- P. ROSEA GRANDIFLORA**—A flashing, carmine-pink jewel from the Indian Himalayas. Starts bloom close to the ground in early spring before leaves appear. 6 inches. 50c each.

P. DENTICULATA—Another from northern India that blooms very early. Flowers are massed in a large, compact globe on stout stalks 1-1½ feet. Shades of lavender and violet. 35c each.

P. FLORINDAE—Like a giant cowslip with pendant, butter yellow, fragrant flowers coated with sulphur colored meal. From Tibet. Summer bloom. 2-3 feet. Under ideal conditions will eventually reach 4 and 5 feet. 50c each.

P. CAPITATA MOOREANA—A very handsome summer blooming primula from northeastern India. Rich purple, bell-like flowers are held in a compact cluster on 12 inch stems that are as heavily silvered as the buds. Has a heliotrope fragrance. 50c each.

SPECIAL CULTURAL NOTES ON ASIATICS

Situations for Asiatic primulas are suggested at the beginning this third Section. Soil and plant foods are the same as for Polyanthus and Acaulis with special attention given to good drainage. Although Asiatic primulas want less sun than Polyanthus, they do not want complete and deep shade. They need a small amount of sun, either in early morning or off and on throughout the day in order to bloom and keep in good health. Water in quantity they must have from the time they begin to leaf in the spring until fall. P. capitata Mooreana is the only Asiatic offered in the above list that keeps its leaves the year around, all the others are herbaceous. Some, like P. Cockburniana, bury their crowns deeply in the soil and can hardly be found until growth begins in late spring. Care should be taken not to injure dormant crowns.

Plant Asiatics at least 18 inches apart to allow adequate space.

Asiatics should be divided every other year at least and,

where growth is very rapid, every year. The best time to divide is after the plants have finished blooming unless a large quantity of seed is desired. In such case, wait several months and divide in early fall. There is a period in the life of most Asiatics when the old root system disappears entirely and the plant is sustained only by the very short new roots beginning growth at the base of the crown just under the soil's surface. Division, therefore, should either take place after flowering when the plant can re-establish on the old root system, or in early fall when the new roots are sufficiently developed. In their homeland they are seen through this practically rootless period by the summer rains and in cultivation they must have the equivalent. Unless plants are kept very moist at this period they may either topple over from inability to develop new roots or crowns may rot. When Asiatics are grown with this knowledge they will multiply by seed, self-sown seedlings and division so rapidly that in a few years your garden will be garbed in oriental splendor.

Seeds

All seed is from the current year's harvest, is picked when fully ripe and tested for germination. For ease in handling the seedlings and to safely establish them in the garden before winter, seeding from January through April is the most practical period. When lifting seedlings from the seed pans, especially Auriculas and Asiatics, disturb the soil as little as possible, keep pans moist and leave outside to freeze the next winter. Many dormant seeds will germinate the following spring. All primrose seed can be made to germinate in a few weeks by rubbing them between sandpaper, a method known as scarifying. For complete information on this, write the American Primrose Society (address given under that heading) for the January, 1944 Quarterly, 25c.

Detailed planting instructions are printed on all of the seed packets.

POLYANTHUS AND AURICULA SEED

POLYANTHUS, HAND-POLLINATED—Seed resulting from hand-pollination of plants selected for outstanding beauty and especially fine characteristics. All of the "Named Polyanthus" are also used as parents. Full description under 'Polyanthus' in Section I. Mixed colors, \$1.00 per packet.

POLYANTHUS, SELECTED FIELD RUN—Seed gathered from Polyanthus listed in Section I except Marine Blues. Mixed colors, 50c per packet.

AURICULAS, HAND-POLLINATED—Hand-pollinated seed from especially beautiful plants listed under Artist's shades and Antique Shades in Section I. Mixed colors, \$1.00 per packet.

ASIATIC PRIMULA SEED

Full descriptions in Section III. Species sold separately in 50c packets.

P. COCKBURNIANA
P. PULVERULENTA
P. PULVERULENTA, BARTLEY PINK STRAIN
P. RED HUGH HYBRID
P. JAPONICA, pink
P. DENTICULATA

P. ROSEA GRANDIFLORA—(Slow germinating unless scarified. If not scarified must have natural or artificial freezing as outlined on seed packet).

P. PSEUDO-SIKKIMENSIS—From Yunnan, China. Nodding, bright yellow bells clustered at the top of a stout 1½-2 foot stalk. Early summer.

ASIATIC SEED MIXTURE—All of the above mixed, except P. rosea grandiflora. \$1.00 per packet.

WHEN ORDERING

Selecting certain shades of Polyanthus, Acaulis and Auriculas can be done only at blossom time, from March to early May depending upon the type. This is also the best shipping time not only for Polyanthus, Acaulis and Auriculas but for Juliaes and Asiatics. If specific colors are not requested, ordering by plant name, plants can be shipped successfully from mid-September to mid-October to milder sections and not later than October 1st to cold climates. For those whose planting season opens after mid-April, it is best to send the order in early to be selected and reserved until shipment is requested. In filling mail orders it is our pleasure to choose the finest plants and to select as nearly as possible the desired shades and colors.

Prices have been kept more or less uniform to encourage a collection of types and colors. There are plants and seeds on hand in insufficient quantity to list, but if request is made for certain kinds, we will be glad to quote prices if in stock.

TERMS AND SHIPPING

Parcels Post is the preferred method of transportation and since the government is discouraging C.O.D. packages, cash, money-order or check should accompany the order. **Remittance should include postage based on the figures below.**

On plant orders under \$5.00 add 10% for points west of the Mississippi and 20% for points east. Retail orders of \$5.00 and over sent post free to all points west of the Mississippi. For points east of the Mississippi add only 10% if order is between \$5.00 and \$10.00. Retail orders of \$10.00 sent post free to all points. Seeds are mailed to all points in the United States and Canada post free. If shipment by express is desired, please make this notation and the order will be sent transportation charges collect.

This year, only Polyanthus can be sold in hundred lots. This is exclusive of Marine Blues. Retail price per hundred: \$17.50; 50 for \$8.75.

Most of the primula stock listed previously and omitted in this catalog will be available in 1945 along with many new species.

WHOLESALE

Wholesale prices on request.

LOCATION

Visitors are very welcome and readily find Barnhaven in Gresham, Oregon, ½ mile south of Powell Valley Road on South Roberts Avenue. Powell Valley Road is the Mt. Hood Loop Highway out of Portland. If driving is not possible, the Gresham bus station is at Powell and Roberts Avenue. A half mile walk south on Roberts Avenue brings you to the gardens naturalized along the banks of Johnson Creek. Telephone: Gresham 4275.

Some Excerpts From Patrons' Letters

"When I received the box from you I thought at first it was a box from the florist because they were all in bloom and a prettier sight I've never seen.

Mrs. J. S., Detroit, Mich.

"I was surely surprised when I opened the box. They were the most wonderful plants I ever saw. I've ordered a lot of plants from many catalogs but I have never seen such a job of packing. The plants were just as perfect as those I transplanted a few days ago, only yours were much larger.

Mrs. C. H. S., Falls City, Oregon.

"In conclusion, I would like to say that the plants you sent me were the very loveliest ones I have ever received regardless of from whom or where."

Mrs. C. A. H., Roanoke, Virginia.



Barnhaven Gardens

Box 218

GRESHAM, OREGON

OUTLOOK PUBLISHING CO. GRESHAM